IN THE UNITED STATES DISTRICT COURT MIDDLE DISTRICT OF TENNESSEE NASHVILLE DIVISION



OWEN CARL BELL) Plaintiff)	CASE NO. Jury Requested 3:17-cv-0959
John McLemore)	
Plus) Garfinkle, McLemore & Young, PLLC)	
2000 Richard Jones Rd # 250, Nashville, TN 37215	
615-383-9495	
Defendants.)	

OBSTRUCTION OF JUSTICE

List of Complaints:

OBSTRUCTION OF JUSTICE, NEGLIGENCE, FRAUD, CONFLICT OF INTEREST, CONSPIRACY,

Conspiracy to commit Fraud and Conspiracy to Conceal Fraud

I believe that John McLemore is fully aware of the multiple falsifications that were made by Mark Dietz et al during the 2014 Trial, Case No. 3:11-0674. John McLemore is acting in collusion with Fred Statum III and Gene Humphreys in their attempts to thwart Case No.

3:16-0CV-02064.

John McLemore is willfully interfering with the legal process, Lawsuit Case No. 3:16-cv-02064, in which Owen Bell is trying to expose the falsifications made during the Mar 2014, Case No. 3:11-0674. The trial against Owen Bell by Mark Dietz et al

Note:

- 1. I believe that John McLemore, The Current Trustee is more interested in his personal financial gain rather than justice being upheld.
- 2. I believe that John McLemore has been trying to thwart the exposure of the deceit by Mark Dietz et al that has been perpetrated on the courts from 2010 thru 2016.

Complaints:

OBSTRUCTION OF JUSTICE:

- 1. Obstruction of Justice by his blockage of discovery in Case No. 3:16-CV-02064
- 2. <u>Obstruction of Justice</u> by feigning that he intends to properly administer the Owen Bell vs Dietz et al claim as per Case No. 3:16-CV-02064
- 3. <u>Followed by Collusion</u> with Fred Statum III and Gene Humpreys to make motion for dismissal on basis that Mark Dietz et al were immune to the falsifications they perpetrated on the court and jury.
- 4. <u>Obstruction of Justice</u> when he had the district court assign him as the Party of Interest in Case No. 3:17-cv-00642 by feigning that he intended to properly administer the Owen Bell vs. Ed Wallis III lawsuit Case No. 3:17-cv-00642
- 5. <u>Obstruction of Justice</u> when he had the district court assign him as the Party of Interest in Case No. 3:17-cv-00640 by feigning that he intended to properly administer the Owen Bell vs. Sammy Bereznac lawsuit Case No. 3:17-cv-00640
- 6. <u>Obstruction of Justice</u> when he had the district court assign him as the Party of Interest in Case No. 3:17-cv-00641 by feigning that he intended to properly administer the Owen Bell vs. Robert Simmons lawsuit Case No. 3:17-cv-00641
- 7. He has subsequently recommended the dismissal of all of these lawsuits.

NEGLIGENCE: (Dereliction of Duty) as the Bankruptcy Trustee (Case No. 16-02966-CW3-7)

- 1. Negligent Failure to administer all of the assets of Owen Bell prudently and timely
- 2. Negligent Failure to administer the Bell vs Dietz asset/claim
- 3. Negligent Failure to administer the Bell vs Dietz asset/claim prudently and timely
- 4. Negligence in failing, as a private Attorney, to advise the person wearing the <u>Bankruptcy</u> <u>Trustee Hat</u> to administer the Bell vs Dietz claim prudently and timely

FRAUD:

- 1. John McLemore feigned that he wants to properly administer the Bell vs Dietz Complaint. Next he worked in collusion with Fred Statum III to put together a motion for dismissal of the case. Next he put in a motion that he did not object to the dismissal of case # 16:3-cv-02064 against Mark Dietz et al for fraud
- 2. Prior to the discharge of the bankruptcy case, John McLemore told me personally that he was not interested in administering the Bell vs Dietz Complaint which was worth \$1,824,000.00
- 3. Charade/Deceit: Now, after the Bankruptcy has been discharged and after I filed a complaint, Case No. 3:16-CV-02064 for \$1,824,000.00, John McLemore states that he wants to administer the Bell vs Dietz asset/claim
- 4. John McLemore simply wants to block discovery in the case of Bell vs Dietz Complaint in order to prevent exposure of the charade of deceitful actions by Mark Dietz et al (as demonstrated by his motion to block the subpoena for discovery) Case No. 3:16-CV-02064
- 5. John McLemore told Alex Koval, my Bankruptcy Attorney: "that he plans to take Owen Bell to the cleaners"

CONFLICT OF INTEREST:

- CONFLICT of INTEREST, between acting as <u>Bankruptcy Trustee</u> and as a private lawyer & law firm in dealing properly with the assets of Owen Bell to satisfy the wrongful judgment against Owen Bell. Case No. Case 3:16-bk-02966 (N5ZX vs Owen Bell)
- 2. John McLemore requested and was granted by the Bankruptcy Court the award to his law firm, the rights to administer the handling and liquidating of the assets of the Owen Bell Estate, bankruptcy case No. 16-02966-CW3-7 because he thought he could quickly liquidate the Estate with a large commission for his law firm.
- 3. John McLemore picks and chooses which assets that he can liquefy the easiest with the most financial gain for his law firm.
- 4. John McLemore picks and chooses which assets to administer. He decided not to administer the Bell vs Dietz Complaint because the \$1,824,000.00 award could be mostly offset by the \$1,412,000.00 claim of N5ZX Inc. and he would not have a huge liquid asset to take his large attorney fee out of.
- 5. Wrongful pursuit of Marla Bell to satisfy the wrongful judgment against Owen Bell
- <u>6.</u> Wrongful pursuit of Marla Bell's home place to satisfy the wrongful judgment against Owen Bell
- <u>7.</u> Wrongful pursuit of Catz Enterprises Inc. to satisfy the wrongful judgment against Owen Bell
- <u>8.</u> Wrongful pursuit of Chris Bell to satisfy the wrongful judgment against Owen Bell

<u>9.</u> Wrongful pursuit of Aviation Enterprises LLC to satisfy the wrongful judgment against Owen Bell

CONSPIRACY:

- 1. Conspiracy in order to continue to conceal the fraud that has been perpetrated on the court and Jury since 2010 by N5ZX Aviation Inc.
- 2. Conspiracy with Mark Dietz et al to help conceal their charade of deceitful actions from 2010 thru 2016
- 3. Conspiracy with Bryan Farney (N5ZX Aviation) to help them conceal their charade of deceitful actions from 2010 thru 2016
- 4. Conspiracy with Gene Humphreys to help conceal the charade of deceitful actions by Mark Dietz, Bryan Farney et al from 2010 thru 2016
- Collusion with Fred Statum III and Gene Humpreys to make motion for dismissal on basis that Mark Dietz et al were immune to the falsifications they perpetrated on the court and jury.

Prayers to this Court for Relief:

- 1. This court to issue an Order (a permanent injunction) to prevent any further interference by John McLemore, or others with the Owen Bell's request for a jury trial of Mark Dietz et al regarding the falsifications they made during the Mar 2014 trial. Case No. 3:11-0674
- 2. \$1,824,000.00 in damages.
- 3. Punitive damages as deemed appropriate by a Jury
- 4. Award Plaintiff the costs of bringing this action as well as such other and additional relief as the Court may determine to be just and proper.
- 5. I am requesting that this court set a trial date for this complaint as soon as possible, during the month of August or September 2017 if at all possible, with 4-5 days for expert witness testimonies.
- 6. Replace the management of the assets of the Owen Bell Bankruptcy Estate from John McLemore to a morally honest law firm.
- 7. Sanctions against John McLemore for his motions for blockage of discovery etc., etc in Case No. 3:16-CV-02064

Respectfully Submitted, Owen Bell 4099 Brick Church Pike Whites Creek, TN 37189 615-585-7765 owenbell41@gmail.com

Pro se Owen Bell

20 June 2017

Copy sent to:
John McLemore
Garfinkle, McLemore & Young, PLLC
2000 Richard Jones Rd # 250, Nashville, TN 37215
(615) 383-9495

Attached is Exhibit G with 28 Intentional Falsifications that were perpetrated on the jury and court during the 2014 trial, Case No. 3:11-0674.

28 Intentional misrepresentations and intentional falsifications: by Mark Dietz. From the 3-25-14 Vol 1A of the N5ZX Trial Transcript = Opening Falsifications (Intentional Lies) (Note: The page and line #s are noted in conjunction with Exhibit B)

P17#1 Mark Dietz states that Owen Bell told Cole Reed, "I have the Best 337 in the marketplace" Explanation: The email facts show that I stated that N5ZX was the "Best Value Pressurized 337" on the market at that time. (A very much different claim)

P17#2 Mark Dietz states that Owen Bell told Cole Reed that he had been maintaining the airplane for 10 years. Explanation: I told Cole Reed that I had developed the STC for the gross weight increase in the experimental category about 10 years earlier and that I had maintained the airplane for about 2 years prior to our initial contact.

P19#3 Mark Dietz states that during an annual inspection, "you take the airplane all apart" Explanation: The fact is that you don't take the airplane all apart. You only need to take enough apart to comply with the FAA requirement under FAR Part 43 appendix D (Attachment A)

P20#4 Mark Dietz states that Owen Bell told Cole Reed, "Best aircraft" Explanation: The email facts show that I stated that N5ZX was the "Best Value Pressurized 337" on the market at that time. (A very different claim)

P20#5 Mark Dietz states that Owen Bell told Cole Reed, "I own it": Explanation: Sam Mollet had been paid in full for the airplane Attachment B = copies of checks to Sam Mollet shows that the bill of sale is to Owen Bell & Aviation Enterprises

P20#6 Mark Dietz states that Owen Bell doesn't actually own the aircraft. Explanation: Sam Mollet had been paid in full for the airplane. Owen Bell never did tell Cole Reed that he owned the aircraft.

P20#7 Mark Dietz states that "just like you own a car, you have to register it" Explanation: As an airplane dealer, you don't have to register an airplane in your name. As per the FAA Registration Dept in Oklahoma City

P21#8 Mark Dietz states that Owen Bell "signed the sales document that said, I own the aircraft." Explanation: See <u>Attachment_C</u> = sales document= Bill of Sale for N5ZX to Owen Bell, Aviation Enterprises

P21#9 Mark Dietz states that \$1500 of the sales component was for transition training. Explanation: The deal was that there was no charge for the \$1500 Value for transition training. (We agreed to do it a no charge, but explained that we were being benevolent and donating the time that was worth the \$1500 Value

P28#10 Mark Dietz states that every time you fly an aircraft you are required to make sure that the logbook entries are appropriate. Explanation: This is a false statement. The aircraft logbooks are not usually kept in the airplane. They are usually not even available for the pilot to evaluate them. The aircraft Mechanics maintain the logbooks in safe place to prevent them from getting lost.

P28#11 Mark Dietz states that the flight log is required to be maintained by the pilot. Explanation: This is a false statement. On non-commercial aircraft, flight logs are not required.

P31#12 Mark Dietz states that "he's supposed to be putting a new engine on. Explanation: This is a false statement. I was supposed to be installing an overhauled engine.

P32#13 Mark Dietz states that the FAA was saying "it's a big deal." (hear say) No written record of that statement

P32#14 Mark Dietz states that I told Cole Reed not to worry about the wings. Explanation: This is a false statement. I told Cole Reed that is would be economically more practical to have a Mechanic in Texas to do the initial evaluation of the wings and then call me for a discussion of what he found.

P32#15 Mark Dietz states that damage had been done to the wings, Explanation: This is a false statement. The log books show that all the work done to the wings had been approved by the FAA. It also shows that annual inspections had been done by non-affiliated Mechanics for 7 previous years and they had all been signed as Air Worthy as per the FAA STC approvals.

P32#16 Mark Dietz states that Robert Simmons wrote a report and sent it to the FAA. Explanation There were no copies of such a report provided to me.

P32#17 Mark Dietz states that Owen Bell wasn't available for several weeks. Explanation: This is a false statement. I worked at the Nashville International Airport. The same airport that the Nashville Flight Standards District Office is Located. There is no record that Cole Reed ever called them to see if they could contact me. Also there is no record that Cole Reed ever contacted the FBO, Signature Case 3:17-cv-00959 Document 1 Filed 06/20/17 Page 6 of 24 PageID #: 6

Flight Support, that we lease space from at the Nashville Airport to see if they could contact me. There was no record of missed calls on my phone, nor any voice messages. They also never called Chris Bell.

P33#18 Mark Dietz states that Owen Bell drilled holes in the wing then hid them so nobody else could find them and covered them up. Explanation: This is a false statement. The holes that I drilled in the wings were all approved by the FAA.

P33#19 Mark Dietz states that Owen Bell deformed the Ribs. Explanation: This is a false statement. The STC clearly states where the fuel line was routed and was approved by the FAA

P33#20 Mark Dietz states that Owen Bell deformed the Ribs. Explanation: This is a false statement. The STC clearly states that screws were installed in the stringers and were approved by the FAA

P33#21 Mark Dietz states that Owen Bell made other unapproved changes. Explanation: This is a false statement. The STC clearly states what was approved by the FAA

P33#22 Mark Dietz states that Owen Bell made fraudulent and false entries in the log books. Explanation: This is a false statement. The STC clearly states what was approved by the FAA

P33#23 Mark Dietz states that Cessna condemned the wings. Explanation: This is a false statement. There is no record of that fact. Cessna Engineering did state that Cessna could not supply new Spar Caps. See the Attachment from DER showing that the spars could have doublers added in order to make them air worthy.

P33#24 Mark Dietz states that Bryan Farney spent \$100K for new wings and paint. Explanation: This is a false statement. The records show \$80+ thousand. **NOTE:** The wings didn't have to be replaced. The entire airplane didn't have to be repainted. **Attachment D** is a DER Explanation of how the wings could be repaired instead of being replaced.

P34#25 Mark Dietz states that Owen and Chris Bell misrepresented the airplane. Explanation: This is a false statement. The changes in the load capability of the airplane took place on 3 Nov 2010 ~16 months after the airplane was sold to Bryan Farney

P34#26 Mark Dietz states that Owen breached his contract. Explanation: This is a false statement. There was no guarantees other than Owen Bell had completed an annual inspection according to the FAR 43 Appendix D to the best of his ability as an IA. (There was no intentional cover up of any aspect of anything)

P34#27 Mark Dietz states that Owen made deceptive statements. Explanation: This is a false statement. There was no guarantees other than Owen Bell had completed an annual inspection according to the FAR 43 Appendix D to the best of his ability. (There was no intentional cover up of any aspect of anything)

P34#28 Mark Dietz states that Owen deceived them in a manner that caused them harm. Explanation: This is a false statement. There was no guarantees other than Owen Bell had completed an annual inspection according to the FAR 43 Appendix D to the best of his ability. (There was no intentional cover up of any aspect of anything) Both Chris Bell and Owen Bell flew this airplane for several hours. There was never any impending danger.

Attachments:

- A. FAR Part 43 appendix D (attached)
- B. Attachment = check copies to Sam Mollet for payment in full (See Exhibit A, page 2)
- C. First Sales document = Bill of Sale for N5ZX to Aviation Enterprises, Owen Bell
- D. Attachment from DER showing that the spars could have doublers added in order to make them air worthy. (This lengthy document is available at your request)

NOTE: I have several individuals in the following categories that are willing to testify to the Validity of the above explanations indicating Intentional Deceit and Perjury by Mark Dietz and Cole Reed

- 1. FAA Certified Airframe and Power plant Mechanics
- 2. FAA Certified Airframe and Power plant inspectors
- 3. FAA Certified DARs (Designated Airworthy Representatives)
- 4. FAA Certified DERs (Designated Engineering Representatives)
- 5. FAA Certified Flight Instructors
- A Licensed Tennessee Attorney- which was present at the trial will testify that Mark Dietz was intentionally "Very Deceitful" during the trial!

Appendix B

(For signature of authorized representative) repair station under Order No Signed rentinent details of the repair Yare on file at this

(Address) (Certificate No.) (Repair station name)

the person authorized by § 43.17 to approve that work shall execute a FAA Form 337 at least in by a person authorized in § 43.17, the person who duplicate. A completed copy of that form shall performs the major repair or major alteration and (c) For a major repair or major alteration made

Given to the aircraft owner; and

stration, Aircraft Registration Branch, Post Office 48 hours after the work is inspected. Box 25082, Oklahoma City, Okla. 73125, within (2) Forwarded to the Federal Aviation Admini-

within the passenger compartment or a baggage compartment, the person who performs the work ing forms shall be distributed as required by para-337 shall be placed on board the aircraft as specified in § 91.417 of this chapter. The remainin at least triplicate. One (1) copy of the FAA Form \S 43.7 of this part shall execute an FAA Form 337 and the person authorized to approve the work by graph (a) (2) and (3) or (c) (1) and (2) of this paragraph as appropriate (d) For extended-range fuel tanks installed

[Doc. No. 1993, 29 FR 5451, Apr. 23, 1964, as amended (Secs. 101, 610, 72 Stat. 737, 780, 49 U.S.C. 1301, 1430) 34330, Aug. 18, 1989] Amdt 43-10, 33 FR 15989, Oct 31, 1968; Amdt 43-1, 52 FR 34101, Sept 9, 1987; Amdt 43-31, 54 FR

APPENDIX C TO PART 43—[RESERVED]

AIRCRAFT) TO BE INCLUDED IN ANNUAL AND (AS APPLICABLE TO THE PARTICULAR 100-HOUR INSPECTIONS SCOPE AND DETAIL

hour inspection shall, before that inspection, reoughly clean the aircraft and aircraft engine. access doors, fairing, and cowling. He shall thormove or open all necessary inspection plates, (a) Each person performing an annual or 100-

the following components of the fuselage and hull hour inspection shall inspect (where applicable) (b) Each person performing an annual or 100-

insecure attachment of fittings. tion, other evidence of failure, and defective or (1) Fabric and skin — for deterioration, distor-

installation, apparent defects, and unsatisfactory (2) Systems and components — for improper

(3) Envelope, gas bags, ballast tanks, and re-

lated parts - for poor condition. (c) Each person performing an annual or 100-

the following components of the cabin and cockpit hour inspection shall inspect (where applicable)

equipment that might foul the controls. group: (1) Generally - for uncleanliness and loose

and apparent defects. (3) Windows and windshields — for deteriora-(2) Seats and safety belts — for poor condition

marking, and (where practicable) improper operation and breakage. (4) Instruments — for poor condition, mounting

installation and improper operation. (5) Flight and engine controls — for improper

improper charge. (7) All systems — for improper installation, poor (6) Batteries for improper installation and

and insecurity of attachment. general condition, apparent and obvious defects hour inspection shall inspect (where applicable) components of the engine and nacelle group as (d) Each person performing an annual or 100-

excessive oil, fuel, or hydraulic leaks, and sources follows: (1) Engine section -- for visual evidence of

of such leaks. (2) Studs and nuts — for improper torquing and

obvious defects. screens and sump drain plugs. If there is weak and for metal particles or foreign matter on cylinder compression, for improper internal condition and improper internal tolerances. (3) Internal engine — for cylinder compression

mounting, and looseness of engine to mount. (4) Engine mount — for cracks, looseness of

condition and deterioration. (5) Flexible vibration dampeners Engine controls — for defects, improper ١ for poor

travel, and improper safetying. (7) Lines, hoses, and clamps - for leaks, im-<u></u>

proper condition and looseness. (8) Exhaust stacks — for cracks, defects, and

curity of mounting. improper attachment. (9) Accessories - for apparent defects in se (10) All systems — for improper installation,

(11) Cowling — for cracks, and defects

poor general condition, defects, and insecure

wur inspection shall inspect following components of the landing gear (e) Each person performing an annual or 100-(where applicable)

(1) All units — for poor condition and insecurity #ttachment.

(2) Shock absorbing devices — for improper fluid level.

(*) Retracting and locking mechanism — for the or excessive wear fatigue, and distortion. Linkages, oper operation. trusses, and members - for

) Hydraulic lines — for leakage. Electrical system - for chafing and im-

Wheels — for cracks, defects, and condition er operation of switches.

Tires — for wear and cuts.

(0) Floats and skis — for insecure attachment obvious or apparent defects.) Brakes — for improper adjustment.

mbly for poor general condition, fabric or skin burity of attachment. moration, distortion, evidence of failure, and ponents of the wing and center section asinspection shall inspect (where applicable) all Each person performing an annual or 100-

nce of failure, insecure attachment, improper (wir Inspection shall inspect (where applicable) all ponent installation, and improper component imponents and systems that make up the comwdition, fabric or skin deterioration, distortion (a) Each person performing an annual or 100empennage assembly for poor general

(N) Each person performing an annual or 100inspection shall inspect (where applicable) following components of the propeller group: Propeller assembly - for cracks, nicks

վ and oil leakage. Bolts -- for improper torquing and lack of

Anti-icing devices — for improper operations obvious defects.

(4) Control mechanisms — for improper operainsecure mounting, and restricted travel.

following components of the radio group: Inspection shall inspect (where applicable) Each person performing an annual or 100

per Installation and insecure mounting. (1) Radio and electronic equipment — Wiring and conduits — for improper routing for im-

soure mounting, and obvious defects. Bonding and shielding — for improper instal-Antenna including trailing antenna - for and poor condition.

each installed miscellaneous item that is not off (j) Each person performing an annual or 100 hour inspection shall inspect (where applicable lation and improper operation. erwise covered by this listing for improper insta

APPENDIX E TO PART 43-ALTIMETER SYSTEM TEST AND INSPECTION

tests and inspections required by § 91.441 sha comply with the following: Each person performing the altimeter system

and restrictions. (a) Static pressure system: (a) Static pressure system:

(1) Ensure freedom from entrapped construit

(2) Determine that leakage is within the tole ances established in § 23.1325 or § \$\frac{25}{25}.132! whichever is applicable

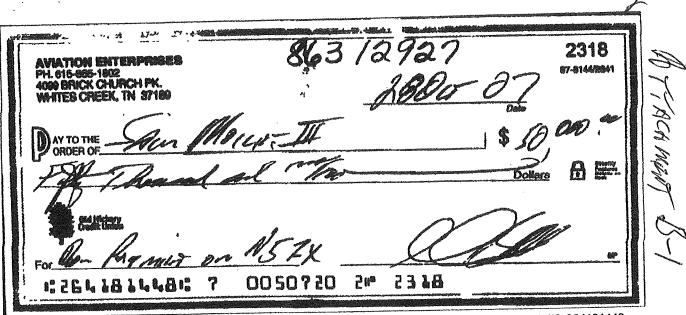
stalled, is operative. (3) Determine that the static port heater, if ii

of the airframe surface have been made the static air pressure for any flight condition in the static pressure system and true ambie would affect the relationship between airpressur (4) Ensure that no alterations or deformation

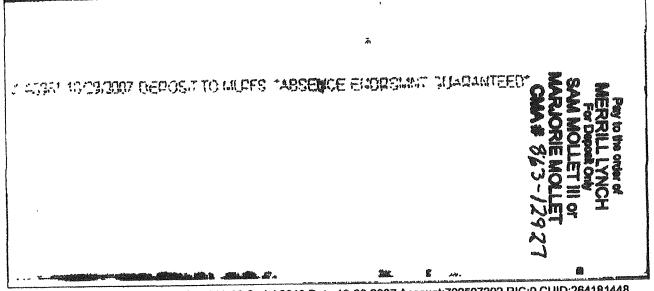
ance may be conducted with the instrument su jected to vibration. When tests are conducted wi in accordance with the following subparagraph Unless otherwise specified, each test for specified condition. allowance shall be made for the variation from the ent temperature of approximately 25 degrees C the temperature substantially different from amt (1) Test by an appropriately rated repair facili (b) Altimeter:

(i) Scale error. With the barometric pressu scale at 29.92 inches of mercury, the altimet shall be subjected successively to pressures or to the maximum normally expected sperational titude of the airplane in which the altimeter is responding to the attitude specified in Table I i be installed. The reduction in pressure, shall I made at a rate not in excess of 20,000 feet p minute to within approximately 2,000 feet of the minute of the reduction in pressure, shall I made in pressure, and it is not p more than 10 minutes, before a reading is take The error at all test points must not exceed the ing to each test point for at least 1 minute, but n timeter shall be kept at the pressure correspon rate compatible with the test equipment. The test point. The test point shall be approached at

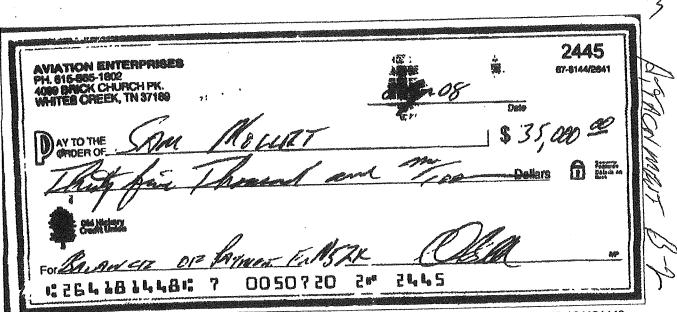
r condition, insecure mounting, and improper subparagraph (i); and while the altimeter is at the (ii) Hysteresis. The hysteresis test Shall becont more than 15 minutes after the altimete tolerances specified in Table I. pressure, the hysteresis test shall commence initial exposure to the pressure corresponding the upper limit of the scale error test prescribe



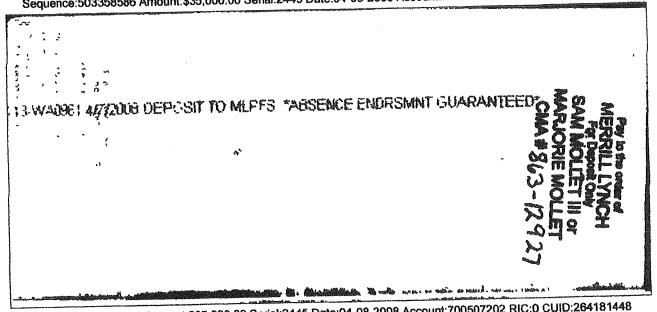
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Structural Repair Analysis Wing Spar Upper Caps

Subject: Cessna Upper Wing Spar Cap Repair

Effectivity: This analysis covers Cessna Skymaster N5ZX; S/N P3370273

Problem: In the mid 1990s Aviation Enterprises did R&D work to install wing stall fences on Cessna Skymasters. They obtained STC SA01093AT on 24 July 1996 for this modification.

The original installation of these stall fences was approved with drilled and tapped holes in the front and rear upper spar caps. The drilled and tapped holes have no documented problems. The wing fences have been flown for 100s of hours for the past 16 plus years with no detrimental effects on the spar caps.

In Nov 2009 Skymaster N12NA suffered a crash attributed to the airplane operating ~500 lbs above approved load and also accomplished an aerobatic demo flight at ~50 mph above the maneuvering speed. N12NA had Aviation Enterprises Winglets, wing extensions and the stall fences on the wings.

The SAIB sent an order to all the Skymaster owners that had Aviation Enterprises wing extensions to have the wings inspected. The top wing spars on N5ZX had drilled and tapped holes in the top spar caps for the wing fences. The FAA personnel in the Atlanta ACO issued AD 2010-21-18 spar caps for the wing fences. The FAA personnel in the top spar caps should be drilled out to effective 3 Nov 2010 indicating that the tapped holes in the top spar caps should be drilled out to 0.188 inch Diameter and replaced with nut plates or nuts and washers under the spar caps including 0.188 inch Diameter and replaced with nut plates or nuts and washers under the spar caps including a 3-4x center to center distance and a 2x edge distance for fasteners. Note that the edge distance for Cessnas Fuel tank cover fasteners installed through the spar caps have an edge distance of only ~1.7D.

S&S Testing has NDT (Eddy Current inspected) on all the openings in the top flanges of the top spar caps of both wings from N5ZX and determined that there were no cracks around any of the holes in the top flanges of the top spar caps.

The fences and wing extensions installed by STC SA01093AT have been removed, and therefore the AD is no longer effective.

Attached is a drawing (Doublers for N5ZX OEM wings) I would like to install doublers under the top spar caps as indicated. (First remove the anchor plates in those sections from under the top flange of the spar cap, next install the doubler with structural adhesive and then reinstall the anchor plates for the fuel tank cover.

The wing extension STC called out by AD2010-21-18 has been removed and therefore the AD is not effective.

Loads: The upper spar cap carries predominantly compression loads due to wing loading. The AD refers to inter-rivet buckling from an accident. A tension check will also be accomplished.

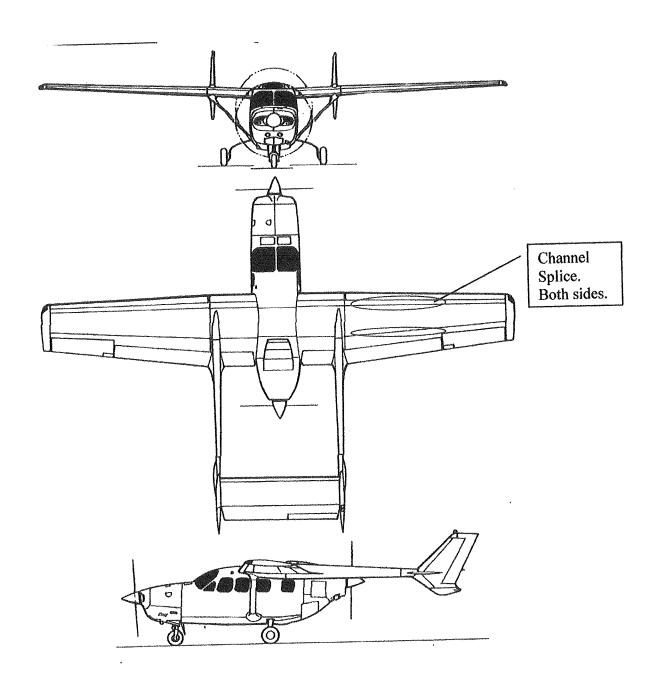


Fig. 1 - Cessna 337 Skymaster

Signed Jul R Mile

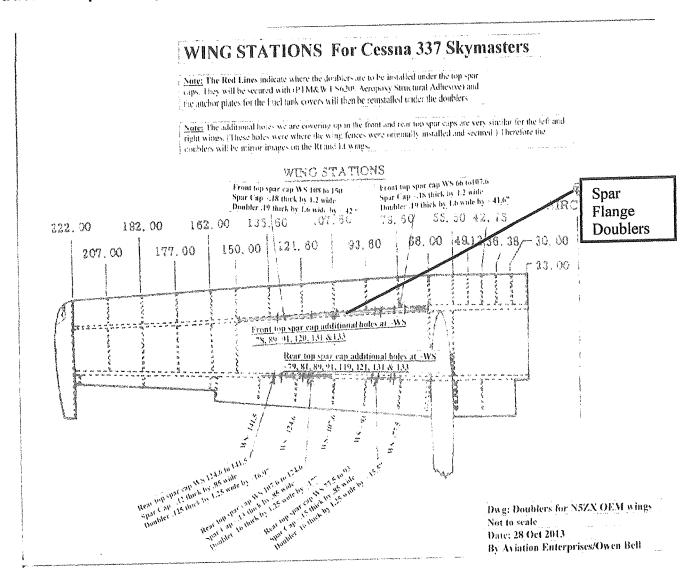


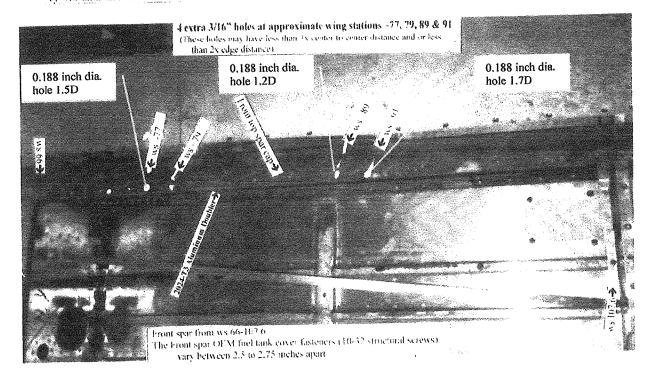
Figure 2 - Location of the Reinforcement

Signed Del RIGG

Dated 12/22/13

Structural Repair Analysis Wing Spar Upper Caps

Note: The Bett Litte indicates where the doubler is to be installed under the tlp spar cap. It will be secured with (Magnoboud 6 198 or Hy of EA 934NA Aeropoxy Structural Adhesive) and the anchor plates for the firel tank covers will then be reinstalled under the doublers. The doubler will be .19 thick by 1.6 wide by 41.6 inches and will reach from the side of the rib at ws 66 to the side of the rib at ws 10% 6

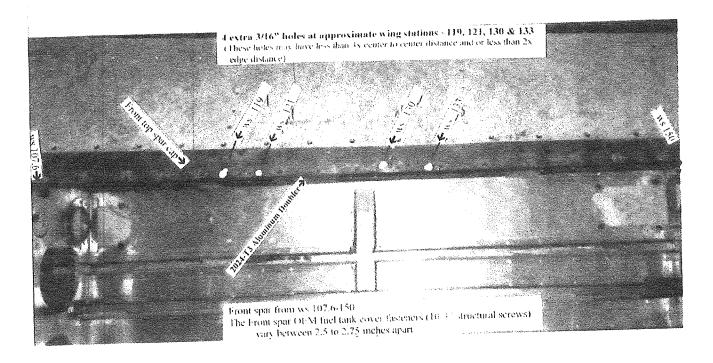


Picture Dwg: PD-FFSD66 (sp.a/cap combler) Date: 14 Nov 2013 By: Aviation Enterprises LLC/Owen Bell Scale: N/A

Figure 3a 66- 107.6 Front Spar Upper Spar Cap Hole Damage

Dul Rille

Note: The <u>Red Line</u> indicates where the doubler is to be installed under the tip spar cap. It will be secured with (Muguohand 6398 or Hysol FA 9348A Aeropoxy Structural Adhesive) and the anchor plates for the fuel tank covers will then be reinstalled under the doublers. The doubler will be 19 thick by 56 wide by 42 inches and will reach from the side of the rib at ws 107.6 to the side of the rib at ws 150.



- Picture Dwg: PD-F1SD107.6 (Spar cap double)
 Date: 14 Nov 2013
- By: Aviation Enterprises I I C/Owen Bell Scale: NA

Figure 3b Sta. 107 -150 Front Spar Upper Spar Cap Hole Damage.

Gard Day (RILL)

Note: The <u>Bod Line</u> indicates where the doubler is to be installed under the to spar cap. It will be secured with (Magnobaud 6398 or Hysol FA 943NA Aeropoxy Structural Adhesive) and the anchor plates for the first task covers will then be reinstalled under the doublers. The doubler will be 16 thick by 15 while by 15.5 inches and will reach from the side of the rib at ws 23.5 to the side of the rib at ws 93.

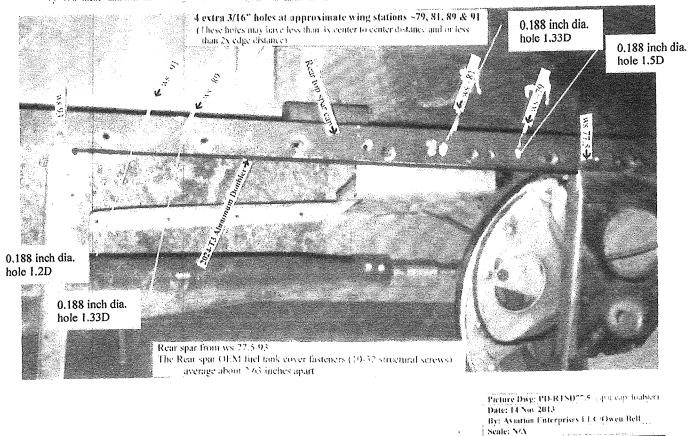


Figure 4a - Aft Spar Sta. 77.5 - 93 Upper Spar Cap Damage.

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Dated 12/22/13

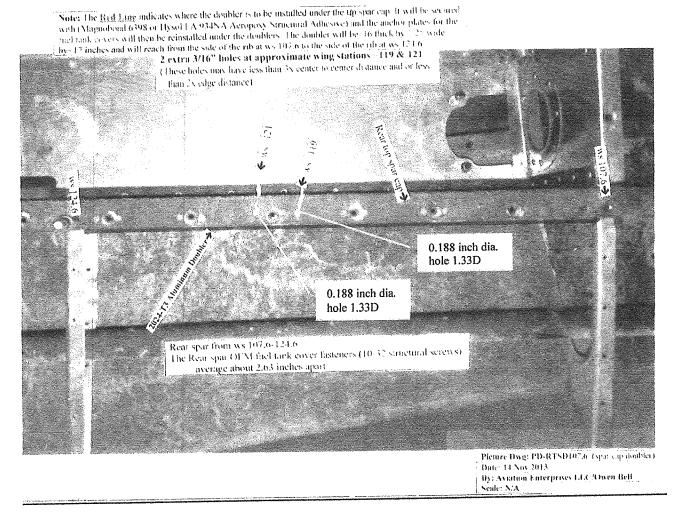
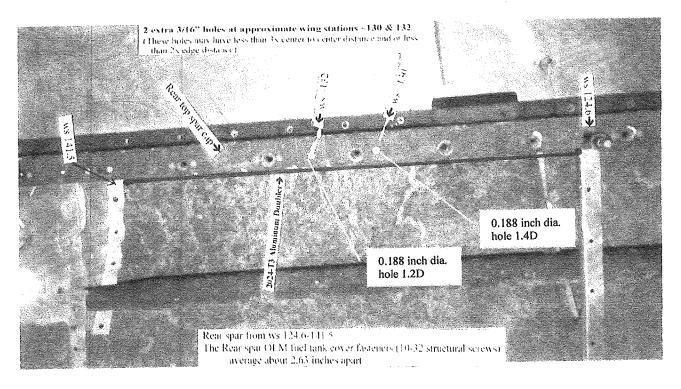


Figure 4b - Aft Spar Sta. 107 - 124.6 Upper Spar Cap Damage.

Jul Rille

Dated 12/22/13

Note: The <u>Red Unv</u> indicates where the doubler is to be installed under the tip spar cap. It will be secured with (Magnobiond 6398 of Hysol LA 934NA Aeropoxy Structural Adhesive) and the anchor plate, so the firel rank covers will then be reinstalled under the doublets. The doubler will be 3.25 thick by 3.25 wide by z_0 9 inches and will reach from the side of the rio at ws 42 i.o to the side of the rib at ws z_0 5



Picture Dwg: PD-RTSD124.6 (spin cap doubler) Date: 14 Nov 2013 By: Aviation Enterprises LLC Owen Bell Scale: N/A

Figure 4c - Aft Spar Sta. 124 - 141.5 Upper Spar Cap Damage.

Dul Rille Signed

Structural Analysis:

The original top spar caps vary and have five different section areas for consideration as shown in Figure 2

Front Spar WS 108-150 $A_{fs} = 0.18 \times 1.2 = 0.216 \text{in}^2$

 $A_{RS77.5} = 0.15 \times 0.85 = 0.128 \text{ in}^2$

 $A_{RS107} = 0.13 \times 0.85 = 0.111 \text{ in}^2$

 $A_{RS124} = 0.12 \times 0.85 = 0.102 \text{ in}^2$

All of the repair straps are one gauge thicker than the spar cap flange and the strap width is 1.2 inches or 1.25 inches wide.

The worst case scenario for al

The repair strap is at Station 124 with the 3/16 diameter hole in the upper spar cap flange.

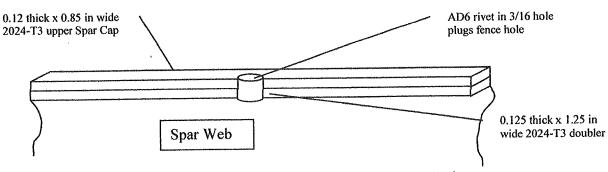


Figure 5 - Cutaway view of spar cap and strap stack up

The original spar cap is 2024-T3 aluminum sheet.

 $F_{tu} = 64,000 \text{ psi} -$

MMPDS-01 Table 3.2.3.0(b₁).

 $F_{cv} = 39,000 \text{ psi}$

Tensile Strength Lost for a 3/16 inch diameter hole out board of RS Station 124:

 $P_{lost} = 0.1875$ in x 0.12 x 64000 = 0.0225 in² x 64000 = 1440 lbs in tension.

 $P_{\text{added}} = (1.25-0.1875) \times 0.125 \times 64000 = 0.133 \text{ in } 2 \times 64000 = 8500 \text{ lbs}$

MS = (8500/1440) - 1 = LARGE

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0-10

Load Transfer:

The fasteners used in the splice are AD 6 rivets in single shear and an Aerospace adhesive with a listed shear strength of Hysol EA 934A.

F_{su} Hysol = 1800 psi @ 180 degrees F per ASTM D1002.

If the minimum spar width is 0.85, then the running shear load for the adhesive is

 $W_{shear} = 1800/0.85$ in = 2117 lbs / in.

If we conservatively assume a fastener spacing of 5D, or 0.94 inches,

 $P_{\text{shear}} = 2117 \times 0.94 \text{ in } = 1990 \text{ lbs}$

The load transfer is 1990 lbs between fasteners

The adhesive shear load allowable is then

 $MS_{shear} = (1990/1440 \times 1.15) - 1 = +0.20$

This is also conservative since the repair straps are 15 or more inches long without additional 3/16" fasteners in the spar.

Compression check:

Given that the AD6 rivets used to plug the holes with short ED will carry the compression load of the spar cap, the added strength of the 0.125 inch 2024-T3 strap bonded on with HYSOL 934A or equivalent adds to the caps margin of safety

The AD6 2117 aluminum is stronger in compression than the 2024-T3 aluminum.

Buckling:

The bonded strap extends from rib to rib and provides a composite upper cap that has twice the thickness and therefore a much better moment of inertia than the original.

Ixx strap > Ixx orig

MS_{strapped} Upper Spar >> MS_{original} Upper Spar

Jul Rille

Conclusion:

The bonded straps added to the upper spar caps provide adequate strength to return the upper spar cap's compression and tension strength. The AD6 rivets installed through the 3/16 holes will provide necessary compression strength to the upper spar cap apart from the additional strength of the bonded strap.

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Installation Instructions:

- 1. Fabricate the repair straps one gauge thicker than the thickness of the spar cap and 1.25 inches wide from 2024-T3 aluminum sheet. Reference Figures 3a, 3b, 4a, 4b, and 4c.
- 2. Break all sharp edges, debur holes and maintain a minimum 125 rms finish per standard practices.
- 3. Match drill the holes through existing structure for the nut plate installations and including the 3/16 inch diameter holes where the stall fences were previously installed. Debur and inspect holes for cracks.
- 4. Protect the repair parts against corrosion with a chromate primer.
- 5. Install AD6 rivets through the old 3/16 holes left over from the stall fence installation.
- 6. Reinstall nut plates using standard practices.

Continued Airworthiness

Inspect the integrity of the bonded straps during normal wing inspections.

Jul R Mila

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U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION STATEMENT OF COMPLIANCE WITH AIRWORTH)S	1. DATE 12/22/2013	0-1			
AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION									
2. MAKE Cessna	3. MODEL NO. 337		aft, Engine, Propeller, etc.)	5. NAME	5. NAME OF APPLICANT Aviation Enterprises, LLC				
	an ann an t-aireann an ann an	LIST OF	DATA						
6. IDENTIFICATION	7. TITLE								
Structural Repair - Cessna Upper Wing Spar Cap Repair	Cessna T337G Upper Wing Spar Cap repair - Structural Analysis of a repair strap.								
	Effectivity: Cessna T337G Reg No. N5ZX , S/N P3370273								
	Notes:								
Repair Approval is for static strength only									
2. This approval is for engineering design data only. It indicates the data listed above demonstrates compliance only with the regulations specified by paragraph and subparagraph listed below as "Applicable Requirements"									
	3. This approval is not applicable for airplanes with wing extensions installed.								
8. PURPOSE OF DATA APP P3370273	 proval in support of tl	he major rep	air for the wing uppe	er spar ca	aps of a Cessna 33	37, SN			
9. APPLICABLE REQUIREMENTS	(List apacific sections) 140	CFR Part 23	Sections 23,303, 23	3.305. 23	3.307, 23.603, 23.6	305,			
23.607, 23.609 and 23.6	13. All amendments	levels as pe	r TCDS A6CE	-, ,··		·			
			_						
10. CERTIFICATION - Under auth Part 183, data listed above and on with applicable requirements of the	attached sheets numbered	NA have be	and in accordance with condit een examined in accordance	ions and Ilm with establis	itations of appointment un shed procedures and four	der 14 CFR id to comply			
Land	mmend approval of these	data							
I (We) Therefore Appro	ove these data								
11. SIGNATURE(S) OF DESIGNA	TED ENGINEERING REPRE	SENTATIVE(S)	12. DESIGNATION NUMB		13. CLASSIFICATION(S)				
Daniel Nelson	RUL		DERT-635975 NM		Structures				
		A PARTICIPATION OF THE PROPERTY OF THE PROPERT							

FAA Form 8110-3 (03/10) SUPERSEDES PREVIOUS EDITION